

SAVOPOL, E.

MARASOIU, Gh.

RUMANIA

Pharmacist

Institute for the State Control of Medicines and Pharmaceutical Research
(Institutul pentru Controlul de Stat al Medicamentului si Cercetari
Farmaceutice).

Bucharest, Farmacia, Revista a Uniunii Societatilor de Stiinte Medicale
din RPR, No 10, Vol X, Oct 62, pp 577-586.

"Delayed Action Tablets." (Paper Compiled at the Institute for the State
Control of Medicines and Pharmaceutical Research.)

Co-author:

SAVOPOL, E., MD, Institute for the State Control of Medicines and
Pharmaceutical Research.

SAVOPOL, E.

RUMANIA

MD

Institute for the State Control of Medicines and Pharmaceutical Research,
Laboratory for Pharmaceutical Technique (Laboratorul de Tehnica
Farmaceutica al Institutului pentru Controlul de Stat al Medicamentului
si Cercetari Farmaceutice).

Bucharest, Farmacia, Revista a Uniunii Societatilor de Stiinta Medicale
din RPR, No 10, Vol X, Oct 62, pp 619-624.

"Contributions to the Study of Extractive Solutions. The Preparation
of Tinctures." (Paper on Research made in the Laboratory for
Pharmaceutical Technique of the Institute for the State Control of
Medicines and Pharmaceutical Research.)

Co-author:

→ IONICA, Verona, Pharmacist, Institute for the State Control of
Medicines and Pharmaceutical Research.

ROMANIA

SAVOPOL, E., MD, Pharmacist; MARINESCU, Josefina, Pharmacist.

Section of Pharmaceutical Technique and Organization of the
Institute of State Control of Medicines and Pharmaceutical
Research (Sectia de tehnica si organizare farmaceutica a
Institutului pentru controlul de stat al medicamentului
si cercetari farmaceutice) - (for all)

Bucharest, Farmacia, No 3, Mar 63, pp 149-155.

"Contributions to the Preparation of Pharmaceutical Suspensions."

(2)

IONICA, Verona, Pharmacist; SAVOPOL, E., Dr; MIHAILESCU, Florica, Pharmacist;
VITEC, Natalia, Pharmacist

Rumania

Institute for State Control of Drugs and Pharmaceutical Research (for all)

Bucharest, Farmacia, No 11, Nov 62, pp 683-690

"Stabilization of the Limits of Alcoholic Concentration in
Tinctures and Extracts"

(4)

FLOREA, H., ing.; SAVOPOL, L., ing.

Application of the aerophotogrammetric method in studying the natural resources in Rumania. Rev geodesie 9 no.1:58-64 '65.

International Conference on the Utilization of Aerophotograms in Studying the Natural Resources. Ibid.:65-66

1. Geological Committee attached to the Rumanian Council of Ministers (for Florea). 2. Higher Council of Agriculture (for Savopol).

ROMANIA

SAVOPOLO, R., MD, Pharmacist.

Bucharest, Farmacia, No 9, Sep 63, pp 549-560

"Remarks on the Pharmaceutical Formulae of the Romanian
Pharmacopoeia, 8th Edition."

STANCHIU, N. [Stancin, N.]; KRUCHIANU, I.; SAVOPOL, Ye.

Milling apparatus for drugstores. Apt. delo 10 no. 1:85-88
Ja-F '61. (MIRA 14:2)

1. Farmatsevticheskiy nauchno-issledovatel'skiy institut,
Bukharest.

(MILLING MACHINERY)

IONESKU-STOYAN, P.; FAYT, I.; STANCHIU, N.; SAVOPOL, Yo.; KRUCHANU, I.
(Bukharest)

Mechanization of some technical processes in pharmacy. Apt. delo 11
no.1:75-79 Ja-F '62. (MIRA 15:4)

(PHARMACY--EQUIPMENT AND SUPPLIES)

L 20930-66 EWT(m)/EWP(e) WH

ACC NR: AP6002574

(N)

SOURCE CODE: UR/0286/65/000/023/0062/0062

AUTHORS: Vinogradov, S. M.; Mikhin, G. Ye.; Arsenkov, R. T.; Savopulo, L. A.

ORG: none

TITLE: Method for fabricating ceramic rings for hydroacoustic apparatus. Class 42, No. 176729 ³⁴

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 62

TOPIC TAGS: ceramic product, ceramic material

ABSTRACT: This Author Certificate presents a method for fabricating ceramic rings for hydroacoustic apparatus. The rings are assembled from ceramic blanks in the form of prisms whose adjacent surfaces are covered with an adhesive compound and subjected to polymerization. To produce prestressing of the rings, the ceramic blanks with the adhesive compound applied to their adjacent surfaces are mounted on a band and are centrifuged at a temperature no greater than 60C.

SUB CODE: 11/ SUBM DATE: 13Jul64

Card 1/1

ULR

UDC: 621.314.631 666.727 ²

ACC NR: AM6014906

Monograph

UR/

Savorskiy, Nikolay Semenovich; Pyatnitskiy, Vladimir Iosifovich; Veremeyenko, Stanislav Vladimirovich

Ultrasonic flaw detection in structural glass plastics (Ul'trazvukovaya defektro-skopiya konstruktsionnogo stekloplastika) Leningrad, 1965. 23 p. illus., biblio.

Series note: Leningradskiy dom nauchno-tekhnikeskoy propagandy.. Proizvodstvennyy opyt. Seriya: Elektrofizicheskiye i elektrokhimicheskiye metody obrabotki metallov.

TOPIC TAGS: reinforced plastic, ultrasonic inspection, DUK 12 flaw detector ultrasonic flaw detection, *glass fiber, ultrasonic equipment / 2*

PURPOSE AND COVERAGE: This pamphlet describes the DUK-12 ultrasonic flaw detector developed at the All-Union Scientific Research Institute for Non-destructive Testing and Quality Control (VNIINK), Kishinev. It serves as a flaw detector and thickness gauge of glass fiber reinforced plastics used for structural materials. The minimum surface is 20 mm², the thickness range is 3 to 30 mm, power source requirement is 200 w, operational frequency is 0.8 Mc, and the screen is 120 mm in diameter. The DUK-12 was approved for serial production at the "Elektrotoch-pribor" Plant, Kishinev, as the first Soviet device for quality control of glass fiber reinforced plastics.

Card 1/2

UDC 678.5:677.521:620.179.16

ACC NR: AM6014906

TABLE OF CONTENTS: none

SUB CODE: 111/10/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 003/

Card 2/2

ACC NR: AP7002986 (N) SOURCE CODE: UR/0413/66/000/024/0083/0083

INVENTOR: Savorovskiy, N. S.; Bordyugov, G. T.; Gol'den, A. D.

ORG: None

TITLE: A ferroprobe flaw detector. Class 42, No. 189613 [announced by the All-Union Scientific Research Institute for Development of Nondestructive Methods and Means for Quality Control of Materials (Vsesoyuznyy nauchno-issledovatel'skiy institut po razrabotke nerazrushayushchikh metodov i sredstv kontrolya kachestva materialov)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 24, 1966, 83

TOPIC TAGS: quality control, flaw detection, cathode ray tube, electronic equipment

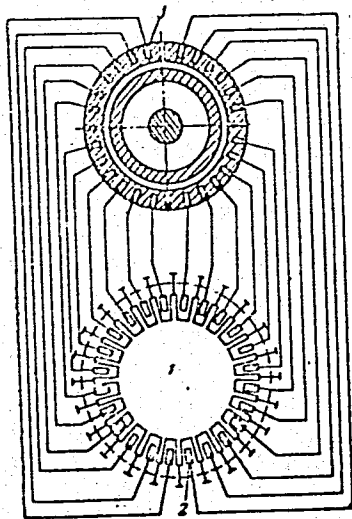
ABSTRACT: This Author's Certificate introduces a ferroprobe flaw detector which contains ferroprobe pickups, an indicator and a commutator. The operational reliability of the flaw detector is improved by making the commutator in the form of a CRT of the unicon type with commutator bars on the screen. Each of these bars is connected to one of the pickups.

Card 1/2

UDC: 620.179.143

ACC NR:

AP7002986



1--unicon CRT; 2--commutator bars; 3--pickups

SUB CODE: 09, 13/ SUBM DATE: - 04Aug65

Cord. 2/2

PYATNITSKIY, V.I.; SAVOROVSKIY, N.S.

Modern means for detecting defects in some structures made from glass
plastics. Plast. massy no.10:44-52 '65. (MIRA 18:10)

L 24821-66 EWT(d)/EWP(e)/EWT(m)/EWP(v)/EWP(j)/T/EWP(k)/EWP(h)/EWP(l)/ETC(m)-6

ACC NR: AP6006956 IJP(c)(A) WW/RM/WH SOURCE CODE: UR/0381/65/000/006/0068/0076

AUTHORS: Savorovskiy, N. S.; Veremeyenko, S. V.; Pyatnitskiy, V. I.

ORG: VNIINK, Kishinev

TITLE: Some special construction features of an ultrasonic defectoscope DUK-12

SOURCE: Defektoskopiya, no. 6, 1965, 68-76

TOPIC TAGS: defectoscope, ultrasonics, fiber glass, electric circuit, electronic equipment/ DUK-12 defectoscope

ABSTRACT: The special features of an ultrasonic defectoscope DUK-12 are discussed. The device is used to investigate the physico-mechanical characteristics of fiber-glass parts and their acoustic characteristics in laminated structures. The block diagram of the instrument is shown in Fig. 1. It operates on the principle of sound wave reflections from the specimen at ultrasonic frequencies. Some of the operating characteristics of the instrument are: 0.8 Mcycle frequency, minimum area for defect identification, 20 mm² area, operating voltages of 24, 36, and 220 volts at 50-cycle frequency, weight 19 kg. The

Card 1/2

UDC: 620.179.16

L 24821-66

AGC NR: AP6006956

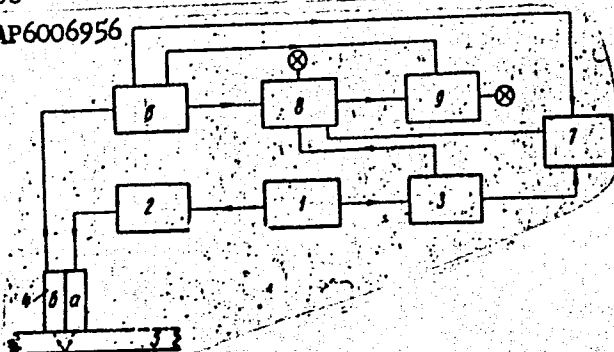


Fig. 1. Block diagram of defectoscope DUK-12.
1 - synchronizer; 2 - radio pulse generator; 3 - time-base generator; 4 - ultra-sonic scanner (a - emitter, b - receiver); 5 - specimen; 6 - receiver; 7 - cathode-ray tube; 8 - automatic defect recorder; 9 - automatic acoustic contact signal indicator.

receiver and scanner of the defectoscope are discussed in some detail. The receiver consists of three units: radio-pulse amplifier, a detector, and a video-amplifier. Orig. art. has: 4 figures.

SUB CODE: 14/

SUBM DATE: 02Sep65/ ORIG REF: 006/

OTH REF: 002

Card 2/2 9

L 22003-66 EWT(d)/EWT(m)/EWP(c)/EWP(v)/EWP(j)/T/EWP(k)/EWP(l)/ETC(m)-6 IJP(c)

ACCESSION NR: AP5024509 WW/RM UR/0191/65/000/010/0044/0052

678.06-419:677.521.019

AUTHOR: Pyatnitskiy, V. I.; Savorovskiy, N. S.

TITLE: Recent means of flaw detection in certain fiberglass structures

SOURCE: Plasticheskiye massy, no. 10, 1965, 44-52

TOPIC TAGS: fiberglass, ultrasonic flaw detector, nondestructive test, quality control, ultrasonic inspection, x ray analysis

ABSTRACT: A number of nondestructive methods for detecting flaws in fiberglass are evaluated to determine the best means for quality control. The ultrasonic echo method may be expediently used for inspecting glued joints and for quality control of different bulky structures. Vibration control methods are recommended for checking the quality of gluing metal, wood and concrete structures with fiberglass and other plastics. The ultrasonic shadow method is recommended for quality control of small articles and mass production items. Thickness of material at any point in the structure can be determined accurately by the ultra-

Card 1/2

L 22003-66

ACCESSION NR: AP5024509

sonic resonance method. The size of cracks in cemented joints after covering with connecting patches can best be determined by x-raying. Orig. art. has: 10 figures

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: 11,20

NR REF SOV: 007

OTHER: 002

Card 2/2 BK

Savory, E.

What was the cost for the national economy of heating supplied by power plants? Also, remarks by J. Szalay and others. P. 453

ENERGIA ES ATOMETCHNIKA. (Energiag, dalkodasi Tudomanyos Egyesulet)
Budapest, Hungary. Vol. 12, no. 7/8, July/August 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 11
November 1959
Uncl.

VADKOVSKIY, N.D.; LEBEDEVA, V.P.; AL'TANI, B.S.; GILEVICH, F.N.;
BABIKOV, V.A.; SAVOSH, I.A.; DOKTOROVICH, M.Kh.; starshiy inzh.;
KRISTAL'NAYA, Ye.F., starshiy inzh.; MALINA, K.N., starshiy tekhnik;
NEFEDOVA, V.I., tekhnik; LEBEDEVA, V.P., otv.red.; NOVIKOVA, Ye.S.,
red.; KARABILOVA, S.F., tekhn.red.

[Standard plan for stations of 600 and 1200 watt wire broadcasting
centers] Tipovoi proekt stantsii radiotranslyatsionnykh uzlov
moshchnost'iu 600 i 1200 vt. Moskva, Gos.izd-vo lit-ry po voprosam
svyazi i radio, 1960. 103 p. (MIRA 13:11)

1. Moscow. Gosudarstvennyy institut po izyskaniyam i proyektiro-
vaniyu sooruzheniy svyazi.
(Radio stations) (Wire broadcasting)

SAVOSHCHENKO, I. S.

42660. SAVOSHCHENKO, I. S. Ob Otboe. Yavennykh Bol'nykh Dlya Sanatornokurortnogo
Lecheniya. Vracheb. Delo, 1948, No 11, STE. 1003-C4

SO: Letovis' Zhurnal'nykh Statey, Vol. 7, 1949

SAVOSHCHENKO, I.S.

Sanitary characteristics of Yessentuki mineral water. Gig. i san.
no.9:21-26 S '54. (MLRA 7:10)

1. Iz Nauchno-issledovatel'skogo bal'neologicheskogo instituta na
Kavkazskikh mineral'nykh vodakh.
(MINERAL WATER,
Caucasus water)

SAVOSHCHENKO, I.S.

Value of certain laboratory examinations in judging the effectiveness of resort therapy for patients with chronic gastritis accompanied by secretory insufficiency. Vop.kur.fizioter. i lech.fiz.kul't (MIRA 11:8)
23 no.4:352-357 J1-Ag '58

1. Iz Yessentukskoy kliniki Nauchno-issledovatel'skogo bal'neologicheskogo instituta na Kavkazskikh Mineral'nykh Vodekh.
(STOMACH--DISEASES)
(YESSENTUKI--THERAPEUTICS, PHYSIOLOGICAL)

SAVOSHCHENKO, I. S. Doc Med Sci -- (diss) "Treatment of inflammatory diseases of the digestive tract in the Yessentuki health resort." Len, 1959. 31 pp
(Min of Health RSFSR. 1st Len Med Inst im Academician I. P. Pavlov), 250 copies
Bibliography: p 31 (10 titles). (KL, 43-59, 127)

SAVOSHCHENKO, Iosif Sergeyevich; KHARCHENKO, L.I., red.; STMBLYANKO,
T.V., tekhn.red.

[Yessentuki health resort] Kurort Essentuki. Izd.5. Stavropol'.
Stavropol'skoe knizhnoe izd-vo, 1959. 167 p. (MIRA 13:5)
(YESSSENTUKI--DESCRIPTION)

SAVOSHCHENKO, I.S., dotsent, otv.red.; TSARFIS, P.G., starshiy nauchnyy
sotrudnik, red.; VERBOV, A.F., starshiy nauchnyy sotrudnik,
red.; VISHNEVSKIY, A.S., prof., red.; PETELIN, S.M., prof., red.;
BARANOVSKAYA, L.V., tekhn.red.

[Current problems in balneotherapy; results of a meeting in
honor of the 40th anniversary of the Soviet regime] Aktual'-
nye voprosy bal'neoterapii; itogi nauchnoi sessii, posvia-
shchennoi 40-letiiu Sovetskoi vlasti. Stavropol' na Kavkaze,
Izd-vo gazety "Stavropol'skaya pravda," 1959. 174 p.
(MIRA 14:5)

1. Pyatigorsk. Pyatigorskiy gosudarstvennyy nauchno-
issledovatel'skiy bal'neologicheskiy institut.
(HYDROTHERAPY)

SAVOSHCHENKO, I.S., nauchnyy red.

[Caucasian mineral waters] Kavkazskie mineral'nye vody. Stavropol',
1960. 275 p. (MIRA 14:7)

(Caucasus—Mineral waters)

SAVOSCENKO, J. S. SAVOSHCHENKO, I. S.

"Peloidtherapie bei Erkrankungen des Gastrointestinaltraktes."

report submitted for the 7th Intl. Cong. of Moorland Research Frankskovy Lagne/
Franzensbad-Prague, 15-19 Sep 60.

SAVOSHCHENKO, I.S., dotsent

Development of research at resorts of the Caucasian Mineral Waters
region. Sov.med. 25 no.2:145-148 F '61. (MIRA 14:3)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo bal'neologicheskogo instituta (direktor - dotsent I.S.Savoshchenko).
(CAUCASUS—HEALTH RESORTS, WATERING PLACES, ETC.)
(MINERAL WATERS)

SAVOSHCHENKO, I.S.; KHARCHENKO, L.I., red.; STEBLYANKO, T.V., tekhn.

[Yessentuki Health Resort]Kurort Essentuki. Stavropol',
Stavropol'skoe knizhnoe izd-vo, 1962. 158 p. (MIRA 15:9)
(YESSENTUKI—HEALTH RESORTS, WATERING-PLACES, ETC.)

SAVOSHCHENKO, I.S.

Indications and contraindication for treating patients with biliary tract diseases at balneological health resorts. Vop.kur., fizioter.i lech. fiz.kul't. 27 no.3:193-197 My-Je '62. (MIRA 15:9)

1. Iz Yessentukskoy kliniki (nauchnyy rukovoditel' - prof. A.S. Vishnevskiy) Bal'neologicheskogo instituta na Kavkazskikh Mineral'nykh Vodakh.

(BILLIARY TRACT--DISESES)

(YESSENTUKI--HEALTH RESORTS, WATERING PLACES, ETC.)

SAVOSHCHENKO, I.S., doktor med. nauk

Study on the classification of chronic colitis and enterocolitis.
Sov. med. 27 no.10:67-75 0 163. (MIRA 17:6)

1. Iz kliniki lechebnogo pitaniya Instituta pitaniya AMN SSSR.
(dir.-chlen-korrespondent AMN SSSR prof. A.A. Pokrovskiy).

SAVOSHCHENKO, Iosif Sergeyevich, doktor med. nauk, prof.;
LAGUTINA, Ye.V., red.

[Therapeutic nutrition in gastrointestinal diseases]
Lecheniye pitaniya pri zheludочно-kishechnykh zaboleva-
niyakh. Moskva, Izd-vo "Znanie," 1964. 69 p. (Narod-
nyi universitet: Fakul'tet zdorov'ia, no.24)
(MIRA 17:12)

SAVOSHCHENKO, I.S.

Some problems of nutritional regimen. Sov. med. 27 no.6:102-106
Je '64. (MIRA 12:1)

1. Klinika lechebnogo pitaniya Instituta pitaniya AMN SSSR (di-
rektor - chlen-korrespondent AMN SSSR prof. A.A. Pokrovskiy),
Moskva.

GINODMAN, L.M.; NESTEROVA, A.P.; OREKHOVICH, V.N.; SAVOSHCHENKO, I.S.;
SOLOV'YEVA, T.A.

Chromatographic study of the gastric juice in chronic gastritis
and peptic ulcer. Vop. med. khim. 10 no.6:604-610 N-D '64.
(MIRA 19:1)

1. Institut khimii prirodnikh soedineniy AN SSSR i Institut
pitaniya AMN SSSR, Moskva.

SAVOSHCHENKO, I.S., prof.; NESTEROVA, A.P.; OLENEVA, V.A. (Moskva)

Changes in the relationship between the fractions of blood serum and gastric juice proteins in peptic ulcer patients as affected by dietotherapy. Vop.pit. 24 no.4:58-63 J1-Ag '65.
(MIRA 18:12)

1. Klinika lechebnogo pitaniya (zav. - prof. I.S.Savoshchenko)
Instituta pitaniya AMN SSSR, Moskva. Submitted September 3, 1964.

SAYOSHIKHOV, I.S.; SHATERNIKOV, V.A.; PROSTYAKOV, K.M.; TUZHILIN, S.A.

Some problems of the clinical aspects, diagnosis and treatment of chronic pancreatitis. Sov.med. 28 no.7:68-74 JI '65.

(MIRA 18:8)

1. Klinika lechebnogo pitaniya Instituta pitaniya AMN SSSR (direkter - prof. A.A.Pekrovskiy).

NEKRASOV, M.M., kand. tekhn. nauk; SAVOSHCHENKO, V.S., inzh.

Heat resistant condenser ceramics. Energ. i elektrotekh. prom. no.2:
19 Ap-Je '64. (MIRA 17:10)

L 1269-66 EPA(s)-2/EPA(w)-2/EWA(h)/EWT(1)/EWT(m)/EWP(i)/EWP(b)/EWP(e) WH

ACCESSION NR: AR5012319

UR/0196/65/000/004/B011/B011
621.315.62

SOURCE: Ref. zh. Elektrotehnika i energetika, Abs. 4B54

AUTHOR: Nekrasov, M. M.⁴⁴; Savoshchenko, V. S.⁴⁴

TITLE: Capacitor ceramics BaTiO₃ 15,44

CITED SOURCE: Sb. Proizv. protsessy i tekhnol. gorn. mashinostr. Khar'kov, Khar'kovsk. un-t, 1964, 166-168

TOPIC TAGS: ceramic capacitor²⁵

TRANSLATION: It is reported that if BaTiO₃ ceramic mass is processed along a conventional lines but with insufficient admission of oxygen, the result is a thermally stable ceramics of BaTiO₃ formula. The dielectric-constant temperature coefficient of BaTiO₃ within -60+80C is 5% or lower; dielectric constant, about 500; tg δ within 40-130C is 1% or lower. The dielectric constant in an electric field of 100-700 v/mm is practically independent of the field strength; tg δ grows from 1 up to 4%. Within 10²-10⁵ cps, where dielectric constant is independent of f, BaTiO₃ is recommended for manufacturing temperature-stable ceramic capacitors. Bibl. 3, figs. 3.

Card 1/1 SUB CODE: MT, EC

ENCL: 00

SAVOSHINSKIY, D.I., kand.ekon.nauk

Methods for evaluating interoperational interruptions in the
loading of equipment. Vest. mash. 38 no.9:64-68 S '58.
(Factory management) (MIRA 11:10)

EMSPALOV, D. M. (probably D. P.) and SAVCHIN, I. V. (1)

"Neutron Generators for Well Studies."

report to be submitted for the Conference on Nuclear Geophysics,
Krakow, Poland, 24-30 Sept 1962.

SAVOSIN, S.I., red.; KOKOSOV, L.V., red.; VLASOVA, N.A., tekhn. red.

[Portable neutron generators in nuclear geophysics] Portativnye generatory neutronov v iadernoi geofizike; sbornik statei (po sovetskim i zarubezhnym rabotam). Moskva, Gosatomizdat, 1962. 203 p. (MIRA 16:2)
(Neutrons) (Geophysical instruments)

KAISOV, R.L.; ZIV, D.M.; LEYPUNSKAYA, D.I.; SAVOSIN, S.I.; FEDOROV, V.V.;
FRADKIN, G.M.; SHIMELEVICH, Yu.S.; BASIN, Ya.N.; KUKHARENKO, N.K.;
SHESTAKOV, B.I.

Use of Ac - Be neutron sources in industrial geophysics. Atom energ.
16 no.3:269-270 Mr '64. (MIRA 17:3)

SAVOSIN, S.I.; SINITSYN, V.I.

Use of nuclear geophysical methods in the search, prospecting, and
working of mineral deposits. Atom. energ. 18 no.1:81-84 Ja '65.
(MIRA 18:2)

ACCESSION NR: AP4042988

S/0051/64/017/001/0125/0128

AUTHORS: Savosina, L. F.; Tsy*kunova, T. M.; Chentsov, Yu. V.

TITLE: Use of electronic outlining to improve the distinguishability of Fresnel rings

SOURCE: Optika i spektroskopiya, v. 17, no. 1, 1964, 125-128

TOPIC TAGS: electron microscope, astigmatism, diffraction analysis, video amplifier

ABSTRACT: The authors describe an electronic circuit for intensifying the outlines of images used in electron microscopes, for the purpose of minimizing astigmatism. The method is based on using a television image amplifier in the electron microscope in lieu of photography to observe the Fresnel rings and other diffraction edge patterns, and on the fact that the information that is used to eliminate the astigmatism is contained essentially in the contours

Card

• 1/3

ACCESSION NR: AP4042988

of the image. The electronic outlining circuit increases the visibility of the diffraction edges, and operates on the principle of adding the second difference of the video signal (obtained with the aid of an open delay line and a subtracting network to the initial video signal, combined with the use of double limiting. "The authors thank V. N. Vertsner and I. I. Tsukkerman for interest in the work and for many valuable hints. Orig. art. has: 4 figures.

ASSOCIATION: None

SUBMITTED: 18Jul63

SUB CODE: EC

NR REF SOV: 001

ENCL: 01

OTHER: 001

Card

2/3

AUTHORS: Yuri'yev, Yu. K., Savosina, M. N. SOV/79-29-2-16/71

TITLE: Alkylation of Benzene With Tetraalkoxy Silanes (Alkilirovaniye benzola tetraalkoksisilanami)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 2, pp 432-435 (USSR)

ABSTRACT: In the present paper the authors investigate in detail the alkylation of benzene with orthoesters of silicic acid in the presence of aluminum chloride (Ref 6) and state that success depends on the following prerequisites: 1) on the ratio of tetraalkoxy silane to $AlCl_3$, 2) on the degree of ramification of the radical in tetraalkoxy silane and 3) on the preparation of tetraalkoxy silane. The data contained in the table show under which conditions ethyl benzene (Experiment 2), sec butyl benzene (Experiments 6 and 7), tert butyl benzene (Experiments 9 and 10) were obtained. The alkylation of benzene was carried out with impure and pure tetraalkoxy silanes, obtained in a benzene medium, in which connection the former gave better yields in alkyl benzenes. The constants obtained agree with those given in publications. With this alkylation no polyalkyl benzenes formed, not even with larger amounts of $AlCl_3$, but only mono-

Card 1/2

Alkylation of Benzene With Tetraalkoxy Silanes

SOV/79-29-2-16/71

alkyl benzenes. On alkylating benzene with tetraalkoxy silanes in the presence of aluminum and iron chloride the same isomerization takes place of the alkyl radical entering the benzene nucleus as is the case of the alkylation of alkyl halides according to G. Gustavson (Ref 7). The results obtained in the work under review made it possible for the authors to suggest the described scheme of benzene alkylation with tetraalkoxy silanes. Thus, monoalkyl benzenes were obtained without impurities of dialkyl benzenes. On alkylating naphthalene under the above conditions, also ethyl benzene (12%) was obtained, besides α -ethyl naphthalene (24%). There are 1 table and 6 references, 4 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: December 29, 1957

Card 2/2

SAVOSINA, M.S.

MOMBELLI, T.P., starshiy nauchnyy sotrudnik; SAVOSINA, M.S., mladshiy nauchnyy sotrudnik.

Industrial testing of an experimental specimen GChD-1 machine for long flax fiber. Tekst.prom. 18 no.4:17-21 Ap '58. (MIRA 11:4)
(Combing machines--Testing)

MOMBELLI, T.P., starshiy nauchnyy sotrudnik; SAVOSINA, M.S., mladshiy nauchnyy sotrudnik

Characteristics of the processing of long flax fibers in its preparation for spinning with the addition of the GChD-2 combing machine in the technological system. Nauch.-issl.trudy TSNILV (MIRA 16:10)
17:65-98 '62.

MONDELII, T.F., staryiy nauchnyy sotrudnik; GIL'ZINA, K.E., staryiy
nauchnyy sotrudnik; Prinsipala uchastiy: BABAYVA, Ye.F., staryiy
nauchnyy sotrudnik

Use of the combings from GChD combers for the manufacture of tow
yarn. Nauch.-issl.trudy TSNIIIV 15:23-42 '61. (MIRA 18:4)

GUSHCHINA, S.A.; SAVOSINA, O.N.; SHARLYKOV, V.A.

Need of the population of Kazan for prosthodontics. Nauch.
trudy Kaz. gos. med. inst. 14:23 '64. (MIRA 18:9)

1. Kafedra ortopedicheskoy stomatologii (zav. - prof. I.M.
Oksman) i stomatologicheskaya poliklinika (glavnyy vrach -
N.Sh.Elinova) Kazanskogo meditsinskogo instituta.

ORLOV, I.V., kand.tekhn.nauk; BEREZHENKO. N.P. [Berezhenko, M.P.]; LEBEDEVA,
N.M. [Lebedieva, N.M.]; SAVOSINA, T.V.: TSYMBANENKO, T.Ye. [TSymbanenko,
T.IE.]

Systems for steam-pressing of clothing made from nonwoven fabrics.
Leh.prom. no.2:7-12 Ap-Je '65.

(MIRA 18:10)

5(3)

AUTHORS:

Kil'disheva, O. V., Lin'kova, M. G., SOV/62-58-11-12/26
Savosina, V. M., Knunyants, I. L.

TITLE:

α, β -Disubstituted α -Acylamino Carboxylic Acids
(α, β -Dizameshchennyye α -atsilaminokarbonovyye kisloty)
Communication II. A New Method of Forming
Oxazole-4-Carboxylic Acids (Soobshcheniye 2. Novyy sposob
obrazovaniya oksazol-4-karbonovyykh kislot)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk,
1958, Nr 11, pp 1348-1353 (USSR)

ABSTRACT:

It has been communicated (Ref 1) that α, β -dihalogen-
 α -acylamino propionic acids easily react with water,
alcohols, and amines and that they form α -substituted
 α -acylamino- β -halogen carboxylic acids (I). Further
investigations have demonstrated that α, β -dihalogen- α -
acylamino propionic acids easily react with mercaptans and
according to the halogen (chlorine or bromine) mono- or
dialkthio acids are obtained. In this paper a new reaction
for the formation of oxazole carboxylic acids from
 α -acylamino- β -halogen acrylic acids is demonstrated.
 α -substituted α -acylamino- β -halogen propionic acids

Card 1/3

α, β -Disubstituted α -Acylamino Carboxylic Acids.
Communication II. A New Method of Forming
Oxazole-4-Carboxylic Acids

SOV/62-58-11-12/26

transform into oxazoline carboxylic acids under the action of alkali. They form according to the conditions either acyloxy-pyroracemic acids or oxazole carboxylic acids. The mechanism of formation of acyloxy pyroracemic acid from α -substituted α -acylamino- β -halogen carboxylic acids has been described already earlier (Ref 3). In this paper a mechanism of formation of oxazole carboxylic acids from α -acylamino- β -halogen acrylic acids was suggested. It was shown that the formation of oxazole carboxylic acid from α -substituted α -acylamino- β -halogen propionic acids takes place over a stage of formation of 2-aryl (or alkaryl)-4-substituted oxazoline-4-carboxylic acids without preceding transition into the corresponding α -acylamino- β -halogen acrylic acids. There are 7 references, 3 of which are Soviet.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR
(Institute of ~~Elemental-organic~~ Compounds of the Academy of
Sciences, USSR)

Card 2/3

SAVOS'KIN, A.N., inzh.

Static testing of a motor bogie. Trudy MIIT no. 121:83-88 '60.
(MIRA 14:4)
(Railroad motorcars--Testing)

SAVOS'KIN, A.N.

Dynamic stresses in the carrier of the reduction gear suspension.
Trudy MIIT no. 121:208-212 '60. (MIRA 14:4)
(Electric railway motors--Testing)

SAVOS'KIN, Anatoliy Nikolayevich; ZABRODIN, B.V., inzh., retsenzent;
PEROVA, A.A., kand. tekhn. nauk, red.; VOROB'YEVA, L.V., tekhn.
red.

[Spring suspensions of electric locomotives] Ressornoe podveshi-
vanie elektrovozov. Moskva, Transzheldorizdat, 1962. 53 p.
(MIRA 15:12)

(Electric locomotives)

SAVOS'KIN, A.N., inzh.

Study of the fatigue strength of electric rolling stock bogie frames.
Trudy MIIT no.157:70-90 '62. (MIRA 16:5)
(Railroads--Rolling stock) (Metals--Fatigue)

SAVOS'KIN, A.N., inzh.

Calculation of the fatigue strength of electric rolling stock bogie
frames taking into account the nature of the dynamic loads. Trudy
MIIT no.157:91-99 162. (MIRA 16:5)
(Railroads--Rolling stock) (Metals--Fatigue)

SAVOS'KIN, A.M., kand. tekhn. nauk; BEREMOVSKIY, A.M., inzh.; MUSHKIN, M.L.

Studying the fatigue endurance of the truck frames of ER2
electric trains. Trudy MIIT no.207:162-171 '65.

(MIRA 19:1)

SAVOS'KIN, A.N., kand. tekhn. nauk

Studying track action on the truck frames of the electric
railroad rolling stock. Trudy MII no.207:86-103 '65.
(MIRA 19:1)

SAVOS'KIN, I. P.

USSR / Cultivated Plants. Medicinal Plants. Essential Oil Plants. M
Toxic Plants.

Libs Jour : Ref Zhur - Biol., No 8, 1958, No 34871

Author : Savos'kin, I. P.

Inst : Not given

Title : Squill (*Scilla maritima*) or *Urginea maritima* (L.).

Orig Pub : Priroda, 1957, #8, 92-93

Abstract : The morphology and development of squill (*Urginea maritima* (L.) Baker of the liliaceae family) are described. The native habitat of the plant are the littorals of the Mediterranean Sea, and its most widespread occurrence is found in the southern littoral, in Algeria and Morocco. The following forms are found: the red variant applicable in the fight against rodents, and the white variant used as medicine in heart diseases and dropsy. In the USSR, the

Card 1/2

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Aromatic Oils

SAVOS'KIN, I.P.

Biological features of squill. Trudy VNIIVSE 12:313-322 '57.
(MIRA 11:12)
(Squill)

SAVOS'KIN, I.P.

Urginea maritima. Priroda 46 no.8:92-93 Ag '57.

(MLRA 10:9)

1. Botanicheskiy sad pri Moskovskom farmatsevticheskom institute.
(Squill)

← SAVCHENKO, I.P., Gen. Biol. Sci. -- (dis) "Biological
principles of ^{the} introduction into cultivation of sea anemones ^{the Voronov} show-
drop." Tashkent, 1959. 13 pp (Tashkent State U in V.V. Kuznetsov),
150 copies (EL, 32-59, 103)

-14-

SAVOS'KIN, I.P.

Effect of environmental conditions on the chemical composition
of cellular membranes. Izv. Sib. otd. AN SSSR no.7:117-119 '59.
(MIRA 12:12)

1. Institut tsitologii i genetiki Sibirskogo otdeleniya AN SSSR.
(Plant cells and tissues)

LOSKIN, I.P.

Biological characteristics of Galanthus Woronowii Losinsk. Bul.
Glav.bot.sada no.33:101-106 '59. (MIRA 12:10)
(Snowdrops)

SAVOS'KIN, I.P.

Biological characteristics of bulbaceous geophytes as related to
their past and present ecology. Bot.zhur. 45 no.7:1073-1078
Jl '60. (MIRA 13:7)

1. Institut tsitologii i genetiki Sibirskogo otdeleniya Akademii
nauk SSSR, g. Novosibirsk.
(Snowdrops) (Urginea)

SAVOS'KIN, I.P.

Biology of the snowdrop *Galanthus voronovii* Loss. and possibilities for its introduction. Bot. zhur. 46 no. 5:726-728 My '61. (MIRA 14:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh i aromaticeskikh rasteniy, Moskovskaya oblasti'.
(Snowdrops)

KHASANOVA, M.R.; CHEREDEYEVA, V.S.; SAVOS'KIN, I.P.

Tetraploid forms of promising early varieties of sugar beets.
Izv. SO AN SSSR no.8. Ser. biol.-med. nauk no.2:90-93 '65.
(MIRA 18:9)

1. Institut tsitologii i genetiki Sibirskogo otdeleniya AN
SSSR, Novosibirsk.

Design Characteristics and the First Operating Results of No. 6 Open-Hearth Furnace of the Zaporozhstal' Works. M. Savon'kin.
(Stal, 1938, No. 11, pp. 22-25). (In Russian). The author describes the design and equipment of one of the open-hearth furnaces at the Zaporozhstal' works, and presents a table giving data concerning the raw materials and operating conditions for five heats.

The Working of Blaw-Knox Valves in the Exhaust-Fine System of the No. 6 Open-Hearth Furnace at the Zaporozhstal Works.
M. Savos'kin. (Stal, 1939, No. 4-5, pp. 25-27). (In Russian).
The investigation of the efficiency of the Blaw-Knox valves in the fine system of one of the open-hearth furnaces at the Zaporozhstal works showed the valves to be unsatisfactory as they allowed a leakage of gas of 14.0-16.5% which led to a corresponding increase in the consumption of gas.

SAVOS'KIN, M.Ye., kandidat tekhnicheskikh nauk.

Testing open-hearth furnace ports on flame models. Stal.proizv.
no.1:74-88 '56. (MLRA 9:9)

1.Zaporozhstal'.
(Open-hearth furnaces--Testing) (Furnaces--Models)

AUTHOR:

- 1) SAVOS'KIN, M.E.
- 2) BOGORODSKIY, A.L., and NOSKOVA, V.A., engineers
- 3) KHOLODOV, A.I., and SUCHIL'NIKOV, S.I., cand. of techn. sci.
- 4) BELYAKOV, A.I.
- 5) KOFMAN, E.
- 6) BELETSKIY, D.E., engineer
- 7) LIFANOV, V.F.

PA - 2407

TITLE:

- 1) Opening of Tapping Holes of Open-Hearth Furnaces by Means of Explosion. (Otkryvaniye stalevypusknykh otverstiy martenovskikh pechey metodom vzryva, Russian) (1 illustration)
- 2) Alteration of the Hydrogen Content in Open-Hearth Steel in the Course of Melting. (Izmeneniye sodержaniya vodoroda v martenovskoy stali po khodu plavki, Russian) (2 illustrations, 2 tables, and 5 citations from Slav publications)
- 3) The Experience on Reconstruction of the Steel Melting Arc Furnace. (Opyt rekonstruktsii dugovoy staleplavil'noy pechi, Russian) (1 table and 2 illustrations)
- 4) The Influence of Cold Hardening of the Edges of the Cold-Rolled Transformer Steel Samples on the Electromagnetic Characteristics. (Vliyaniye naklepa kromok prob kholodnokatanoy transformatornoy stali na elektromagnitnyye kharakteristiki, Russian). (5 tables and 4 illustrations)

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FA - 2407

- 5) About the Work of the Research Laboratory on Production and Labour Organization. (O rabote issledovatel'skoy laboratorii po organizatsii proizvodstva i truda, Russian)
- 6) About Manufacturing of Steel Castings with Enclosed Shrinkage Heads. (Ob otlivke stal'nykh detaley s zakrytymi pribylyami, Russian)
- 7) Reconstruction of the Heating Furnace for Small Ingots. (Rekonstruktsiya metodicheskoy pechi dlya malykh slitkov, Russian).

PERIODICAL: Stal', 1957, Vol 17, Nr 2, pp 181 - 189 (U.S.S.R.)
Received: 5 / 1957 Reviewed: 5 / 1957

ASSOCIATION: 1) "Zapotozhstal'" Plant
2) Ural Machine-Factory
3) Not given.
4) Foundry of Novosibirsk
5) "Zapotozhstal'" Plant
6) Foundry "Petrovskiy"
7) Foundry of Petrovsk-Zabaykal'skiy

PRESENTED BY:

SUBMITTED:

AVAILABLE: Library of Congress.

Card 2/2

SOV/137-58-8-16505

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 39 (USSR)

AUTHOR: Savos'kin, M.Ye.

TITLE: Piercing of Discharge Openings in Open-hearth Furnaces With the Aid of Cumulative Charges (Razdelka stalevypusknykh otverstiy martenovskikh pechey kumulyativnymi zaryadami)

PERIODICAL: Tr. Nauchno-tekhn. o-va chernoy metallurgii, 1957, Vol 18, pp 515-517

ABSTRACT: The author describes the equipment employed and the results obtained during experiments on piercing of discharge openings in furnaces of the "Zaporozhstal'" Plant by means of a cumulative charge (CC). The design of the CC as well as the method of its employment were copied from Czechoslovakian plants. The explosion of an instant-action detonator capsule sets off the main charge composed of 125 g of trotyl; the rapid combustion of the latter results in the formation of large volume of gases which travel at a velocity of 700-12, 000 m/sec. The piercing action relies on the energy of the stream of gases concentrated on a small area. None of the discharge openings were damaged in the course of testing. The method of piercing

Card 1/2

SOV/137-58-8-16505

Piercing of Discharge Openings in Open-hearth Furnaces (cont.)

openings by means of CC's (which have proved to be safe, provided that necessary precautions are observed) was fully adopted at the smelting shop.
Ye.T.

1. Open hearth furnaces--Operation
2. Open hearth furnaces--Equipment
3. Explosive charges--Performance

Card 2/2

SAVOS'KIN, M.Ye., inzh.

First campaign of the Bhilai Metallurgical Plant open-hearth furnace.
Stal' 20 no.10:898-899 0 '60. (MIRA 13:9)
(India--Open-hearth furnaces)

SAVOS'KIN, N.M., inzhener; SHASKOL'SKIY, B.V., kandidat tekhnicheskikh nauk; TIKHONOV, A.Ya., tekhnicheskiiy redaktor

[Manual on specification sheets for metal cutting tools; abridged specification sheets for technicians and norm setters] Rukovodstvo po pasportizatsii metallovezhushchikh stankov; sokrashchennyye pasporta dlia tekhnologov i normirovshchikov. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 367 p. (MLRA 9:12)

1. Russia (1923- U.S.S.R.) Ministerstvo stankostroitel'noy i instrumental'noy promyshlennosti. Nauchno-issledovatel'skoye byuro tekhnicheskikh normativov.

(Cutting tools)

SAVOS'KIN, N.M.

Abridged and complete certificates for metal-cutting machines.

Stan. 1 instr. 27 no.11:24 N'56.

(MIRA 10:1)

(Machine tools) (Machinery--Tables, calculations, etc.)

GAL'TSOV, A.D.; DENISYUK, I.N.; LEVANDOVSKIY, S.N.; LOSEV, A.G.; PEZIK, M.O.; PETROCHENKO, P.F.; SAVOS'KIN, N.M.; TRUBITSKIY, G.R.; KHISIN, R.I.; KHROMILIN, V.A.; ALEKSEYEV, S.S., retsenzent; GAL'PERIN, L.I., retsenzent; GRANOVSKIY, Ye.N., retsenzent; ZAKHAROV, N.N., retsenzent; KVASHNIN, S.A., retsenzent; KEREKESH, V.V., retsenzent; KOTENKO, I.N., retsenzent; LIVSHITS, I.M., retsenzent; LERNER, G.V., retsenzent; NEVSKIY, B.A., retsenzent; NOVIKOV, V.F., retsenzent; RAZAMAT, E.S., retsenzent; SERGEYEV, A.V., retsenzent; STEFANOV, V.P., retsenzent; TOLCHENOV, T.V., retsenzent; FEDOTOV, F.G., retsenzent; VOL'SKIY, V.S., red.; STRUZHESTRAKH, Ya.I., red.; USPENSKIY, Ya.K., red.; SEMENOVA, M.M., red.izd-va; MODEL', B.I., tekhn.red.

[Handbook for work-norm experts in machine manufacture] Spravochnik normirovshchika-mashinostroitelia v 4 tomakh. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry. Vol.1. [Fundamentals of technical normalization] Osnovy tekhnicheskogo normirovaniia. 1959. 676 p. (MIRA 12:12)

(Standardization)

1. SAVOS'KIN, P. G.
2. USSR (600)
4. Seed Industry
7. What sort of seed plots the state farm should have.
Sel. 1 sem. 19 No. 12, 1952

9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

- [illegible]

SAVOS'KIN, P.G.

Urgent problems in seed production. Sakh.prom.30 no.1:62-64
Ja '56. (MIRA 9:6)

1.Sumskaya semennaya inspeksiya Glavsakhara.
(Sugar beets)

L 45818-66 EE(1)/ET(t)/EP(t)/ETI LP(s) JD

ACC NR: AP6031532

SOURCE CODE: UR/0386/66/004/004/0129/0131

AUTHOR: Mitsuk, V. Ye.; Savoskin, V. I.; Chernikov, V. A.

ORG: Physics Department of the Moscow State University im. M. V. Lomonosov (Fizicheskii fakul'tet Moskovskogo gosudarstvennogo universiteta)

TITLE: Breakdown at optical frequencies in the presence of diffusion losses

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 4, no. 4, 1966, 129-131

TOPIC TAGS: laser application, dielectric breakdown, physical diffusion, optic measurement, optic property

ABSTRACT: The authors present results of experiments on breakdown in krypton¹ and xenon at optical frequencies and low pressures. The size of the focusing volume was varied in order to clarify the role of diffusion during breakdown.² A ruby laser was used, operating in the single-pulse mode (60 nsec and ~0.5 J). The laser parameters were measured directly during the time of the experiment. Lenses, corrected for aberration, focused the laser beam inside a glass vacuum chamber containing the investigated gas at a fixed pressure. The occurrence of the discharge was monitored visually and by a photoelectric method. The obtained pressure dependence of the light-wave threshold electric field intensity in krypton and xenon is in good qualitative agreement with calculations based on the avalanche theory without account of losses. However, the experimental values of the threshold electric-field intensity were higher

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ACC NR: AP6031582

than the theoretical ones in the entire region of the investigated pressures, the difference increasing with decreasing pressure; this can apparently be attributed to the increase in the role of diffusion loss with decreasing pressure. To obtain more details on the role of the diffusion losses, the threshold field intensity was measured with focusing lenses having different focal distances (from 18 to 180 mm). These results show conclusively that in breakdown at optical frequencies, at pressures below atmospheric, diffusion electron losses play an important role during the stage of development of the electron avalanche, and lead to an increase of the threshold field intensity. Other types of losses (recombination and elastic losses) are insignificant under these conditions. Allowance for the diffusion losses, made under the assumption that the diffusion of the electrons from the focusing volume is free and that an important role is played in the investigated gases by slow-electron diffusion due to the Ramsauer effect, gives good agreement between the experimental results and the avalanche theory. Orig. art. has: 3 figures and 1 formula. [02]

SUB CODE: 20/ SUBM DATE: 31May66/ ORIG REF: 001/ OTH REF: 001/ ATD PRESS: 5083

Card 2/2

AUTHORS: Granovskiy, V. L., Ryumina, K. P.,
Savoskin, V. I., Timofeyeva, G. G.

SOV, '56-35-1-5/59

TITLE: Observations of the Pinch Effect During a Decrease of
Amperage (Nablyudeniya pinch-effekta pri umen'shayushcheysya
sile toka)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958,
Vol. 35, Nr 1, pp. 45 - 49 (USSR)

ABSTRACT: The influence of the plasma's own magnetic field upon
the plasma column has already been investigated by various
authors (Refs 1-5); in some cases this was done in the
case of increasing amperage (e.g. Ref 4). In the present
paper the authors describe investigations of plasma deformations
in the case of decreasing amperage in discharge tubes
of 10 and 32 mm diameter in hydrogen- or mercury vapor
at from 10^{-3} to 10^{-2} torr, at current pulses of ~ 300
microseconds and amplitudes of from 1,3 to 5,5 kA (300 μ F,
1-3 kV). For photorecording an electron-optical trans-
former (type PIM-3, developed by M.M. Butlerov) was used.
Photographs are given of a number of contracted, bent, or

Card 1/2

Observations of the Pinch Effect During a Decrease of SOV/56-35-1-5/59
Amperage

kinked plasma filaments. It was found that for $di/dt < 0$ such electrodynamic deformations occur, which vanish again at points of high gas density (i.e. according to experimental conditions near the cathode or near the anode). Exposure in each case lasted 1,5 microseconds. There are 3 figures, 1 table, and 6 references, 2 of which are Soviet.

ASSOCIATION: Vsesoyuznyy elektrotekhnicheskiy institut (All-Union
Institute of Electrical Engineering)

SUBMITTED: February 12, 1958

Card 2/2

10(4)
AUTHORS: Glotova, G. I., Granovskiy, V. L., Savoskin, V. I. SOV/56-35-6-9/44

TITLE: A Comparison of the Decay Rates of the Plasma in Hydrogen and Deuterium (Sravneniye skorostey raspada plazmy v vodorode i deyterii)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958, Vol 35, Nr 6, pp 1380-1385 (USSR)

ABSTRACT: Decay rates and deionization depend on the properties of the gas molecules (as e.g. on the effective cross section, on mass, ionization potential, and excitation). The following are the aims of the present paper: 1) Comparison between the deionization rates of the hydrogen isotopes H and D, and 2) a comparison of these ratios with those of the atomic weights of these gases. The methods employed as well as the apparatus used (for wiring circuit see figure 1) are described in short (see also references 1-5). Measurements were carried out at pressures of 0.015 - 0.6 torr and with tube diameters of $d=3.2 - 6.5$ cm, and at values of the preceding current amounting to $I_0 = 60 - 1500$ mA, by the method of the oscillography of the ion current recorded with a negative probe. Under these experimental conditions, the relative deionization rate in H and D decreased with time. The pressure dependence of the velocity

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SOV/56-35-6-9/44

A Comparison of the Decay Rates of the Plasma in Hydrogen and Deuterium

of the process does not develop monotonously but passes through a maximum at $pd \sim 10^{-1} - 1$ torr cm. For the so-called deionization "time constants" τ_D and τ_H it holds that: $\tau_D/\tau_H = 1.41$,

$\tau_D/\tau_H = (A_D/A_H)^{1/2} = (m_D/m_H)^{1/2} = \sqrt{2}$, (A = atomic weight). This holds for all pressures both under diffusion conditions ($p < p_m$, i.e.

$pd \leq 10^{-1}$ torr) and under recombination conditions ($p > p_m$, i.e.

$pd \geq 1$ torr). Under recombination conditions the following elementary recombination processes are possible:

- 1) $M^+ + e \rightarrow M + h\nu$ (emission)
- 2) $M^+ + 2e \rightarrow M + e$ (double collision)
- 3) $M^+ + e + M \rightarrow 2M$ (treble collision)
- 4) $e + M \rightarrow M^-$; $M^- + M^+ \rightarrow 2M$ (electron capture by neutral molecule followed by ion recombination) and
- 5) $M_2 + e \rightarrow M^* + M$ (dissociative recombination).

Card 2/3

SOV/56-35-6-9/44

A comparison of the Decay Rates of the Plasma in Hydrogen and Deuterium

A discussion of these possibilities shows that mainly case 3) is of importance for recombination.-There are 4 figures and 12 references, 3 of which are Soviet.

ASSOCIATION: Vsesoyuznyy elektrotekhnicheskiy institut, g. Moskva
(All-Union Electrotechnical Institute, City of Moscow)

SUBMITTED: June 24, 1958

Card 3/3

SAVOSKIN, VI

Voprosy Magnitnohidrodinamiki i Dinamiki Plazmy. Trudy Konferentsii po Magnitnohidrodinamike, Riga, 2-10 July 1958 g. (Problems of Magneto-hydrodynamics and Plasma Dynamics. Works of the Conference On Magneto-hydrodynamics, Riga, 2-10 July 1958), Riga, 1959, 333 pp.

The majority of the texts of the 55 conference reports and discussions at reports are presented in the source in abbreviated form. Preliminary published reports are included there as brief abstracts only. The material published there for the first time (abbreviated and unabbreviated) are as follows:

"The Role of Magnetohydrodynamics and Plasma Dynamics in Certain Problems of Astrophysics," by D. A. Frank-Kamenetskiy, Moscow, pp 7-11.

Magnetohydrodynamics and the Study of Variations of Cosmic Rays,
by L. I. Dorman, Moscow, pp 13.44

"Cosmic Ray Spectra and Their Role in Cosmic Gas Dynamics," by S. I. Syrovatskiy, Moscow, pp 45-18

"The Influence of a Magnetic Field on the Stability of Flow of a Contracting Fluid," by Ye. P. Velichkov, Moscow, pp 49-53

"Some Problems of the Motion of a Particled Plasma in a Magnetic Field,"
by Ya. P. Yeliseitsky, Moscow, pp 59-60

"On Nonlinear Steady-State Oscillations of a Rarified Plasma in a Magnetic Field," by R. Z. Sagdeev, Moscow, pp 61-65

..... "On One Collection of Applications of the Equations of Isomathodynamics to a Plasma," by S. I. Bratsintskiy, Moscow, pp 67-71 (Discussion of the report by R. V. Polovin, Kharkov, pp 71-72)

"On the Possibility of Accelerating Charged Particles by Means of
Stack Waves in a Magnetized Plasma," by L. I. Dorman and G. I. Freydlant,
Moscow and Gor'kiy, pp 77-81

"On the Acceleration of Charged Particles During Powerful Impulses Discharges and During the Collision of Magnetical Clouds," by L. I. Dorman, Moscow, pp 83-88

"The Influence of a Longitudinal Magnetic Field on the Temperature of the Electrons in a Plasma," by M. V. Kopylov, Izda, pp 89-92

"Investigation of Certain Characteristics of a Plasma of Xenon and Argon Behind a Powerful Shock Wave," by S. R. Molodtsov, Moscow, pp 93-105

"Observation of Electroluminescent Conversion of an Arc with the Aid of an Electron-Optical Converter," by V. I. Ginzburg, K. P. Potvin, V. I. Serebren, and G. G. Tsifeyev, Moscow, pp 27-35.

"On the Interaction of Weak Perturbations With Diacriticities and the Stability of Shock Waves in Magnetohydrodynamics," by V. M. Kozlovskiy, *Dokl. Akad. Nauk SSSR*, pp. 117-125.

"On the Stability of Shock Waves in Magneto-hydrodynamics," by G. A. Syromonskiy, Moscow, pp 127-131

"On the Scattering of Hypermagnetic Waves on Turbulent Fluctuations," by A. G. Sitenko and Yu. A. Kirichenko, *Izv'ezh.*, pp 143-146

"On the Deeping of Magneto-hydrodynamic waves in a Plasma," by R. Z. Bardleyev, Moscow, pp 147-149

"Simple Waves in Magnetohydrodynamics," by A. I. Akhiezer, G. Ya. Lyubarskiy, and N. V. Polovin, Koal'kov, pp 151-157

"Two-Dimensional Problems of Magnetohydrodynamics," by O. S. Golitsyn, Moscow, pp 161-165

"On Wave-Induced Flows in Magneto hydrodynamics," by A. I. Imbrovskiy.
Moscow, pp 167-171

"Oscillations of an Infinite Gas Cylinder With Its Own Gravitation in a Magnetic Field," by I. M. Yavorovskaya, Moscow, pp 175-183

"On Magnetic Boundary Layers and Electric Current Discharges in Moving Media," by V. F. Zhigulev, Moscow, pp 185-190

L 57770-65 EEC-4/EEC(b)-2/EWG(r)/EEC(b)-2/EWA(h)/EWA(k)/EWP(k)/EWT(d)/EWT(l)/
 EWT(m)/EEC(t), FB/EH(i)/EWA(m)-2/EWP(e) Pf-4/Pg-4/Pi-4/Pk-4/Pl-4/Pm-4/Pn-4/
 Po-4/Pq-4/PeB SCTB/IJP(c) WH/WG
 ACCESSION NR: AP5015644 UR/0057/65/035/006/1156/1158
 533.9.07

AUTHOR: Mitsuk, V. Ye.; Savoskin, V. I.; Chernikov, V. A.

TITLE: Measurement of the electron density in plasma by means of an interferometric method using a ruby laser

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 6, 1965, 1156-1158

TOPIC TAGS: plasma, laser, Fabry Perot interferometer, plasma diagnostics, electron concentration, electron density

ABSTRACT: A device for measuring the electron density of a plasma is described which is based on the use of a ruby laser with a Fabry-Perot etalon partially filled with plasma. A 12-cm-long ruby rod with a 10-mm diameter with dielectric coatings was utilized. A laser pulse 0.7 msec in duration was synchronous with a pulsed discharge from a LC circuit in a tube 1.3 cm in diameter filled with argon at a pressure of 10 mm Hg. The pulse duration was about 1 msec, and the current reached several kAmp. The tube, located between the mirrors of the etalon, contained optical windows for passage of the probing laser

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beam perpendicular to the discharge axis. An interference filter at 6943 Å with a 10-Å band was used to filter out plasma radiation. After its passage through the tube, the laser beam passed through a 3-mm diaphragm. The electron density was determined by comparing a sequence of interference patterns obtained prior to and after the discharge. It was established that variation of the refraction index due to variation of the gas density during discharge could be disregarded, that the plasma was optically thin to laser radiation, and that the effect of the laser beam on the plasma was negligible. Orig. art. has: 2 figures and 3 formulas. [CS]

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M. V. Lomonosova, Fizicheskiy fakul'tet (Moscow State University, Department of Physics)

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L 54994-65 EWT(m)/EPF(n)-2/T/EWP(t)/EWP(b)/EWA(c) Pu-4 IJP(c) JD/WW/JG

ACCESSION NR: AP5011935

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546.831'431

AUTHOR: Limar', T. F.; Savos'kina, A. I.; Shepelenko, L. A.

TITLE: Preparation of barium zirconate by coprecipitation

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 3, 1965, 383-387

TOPIC TAGS: barium zirconate, barium, zirconate, coprecipitation, coprecipitate thermal decomposition, coprecipitate decomposition

ABSTRACT: The object of the study was to prepare barium zirconate by thermal decomposition of Ba-Zr coprecipitates. The following systems were used in studying the conditions of coprecipitation of Ba and Zr:

$\text{BaCl}_2\text{-ZrOCl}_2\text{-Na}_2\text{CO}_3\text{-H}_2\text{O}$; $\text{BaCl}_2\text{-ZrOCl}_2\text{-(NH}_4)_2\text{CO}_3\text{-H}_2\text{O}$; $\text{BaCl}_2\text{-ZrOCl}_2\text{-(NH}_4)_2\text{CO}_3\text{-NH}_4\text{OH-H}_2\text{O}$. In all experiments an equimolar quantity of Ba and Zr was used (up to 0.25 gram-ion/l) and the quantity of precipitating reagents was such as to ensure that the ratio $n = (\text{NH}_4)_2\text{CO}_3(\text{Na}_2\text{CO}_3)/\text{Zr}^{4+}(\text{Ba}^{2+})$ varied from 1.0 to 6.0. A quantitative coprecipitation of Ba and Zr is effected with Na_2CO_3 at a ratio of $\text{BaCl}_2\text{:ZrOCl}_2\text{:Na}_2\text{CO}_3 = 1\text{:}1\text{:}(2.5\text{-}3.0)$ in the 9.5-9.8 pH range; and with a mixture of ammo-

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nium carbonate and ammonia at a ratio of $\text{BaCl}_2:\text{ZrOCl}_2:(\text{NH}_4)_2\text{CO}_3:\text{NH}_4\text{OH} = 1:1:1.5:$
:(4-6) in the 9.3-9.4 pH range. Coprecipitation of barium and zirconium with a mix-
ture of $(\text{NH}_4)_2\text{CO}_3 + \text{NH}_4\text{OH}$ yields BaCO_3 and $\text{Zr}(\text{OH})_4$ and coprecipitation with Na_2CO_3
yields BaCO_3 , $\text{Zr}(\text{OH})_4$, and some $\text{Na}[\text{Zr}(\text{OH})_3\text{CO}_3]$. The precipitates were dried and
heated to 1100°C at a rate of 150° to 200°C/hr . A 9-10 hour calcining at 1100°C
yielded barium zirconate powder of particle size less than 1μ . Orig. art. has: 4
tables and 1 figure.

ASSOCIATION: Donetskiy filial VNII khimicheskikh reaktivov i osobochistykh
veshchestv (Donets Branch of the VNII of Chemical Reagents and High Purity Compounds)

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21.4200

AUTHORS: Zemlyanukhin, V.I., and Savoskina, G.P.

TITLE: The extraction of Americium with Tributyl Phosphate

PERIODICAL: Radiokhimiya, 1961, Vol.3, No.4, pp. 411-416

TEXT: The authors carried out investigations on the extraction of Am from HNO_3 solutions. Quantities of Am ($< 0.1 \text{ mg/l}$) containing not more than 2% of other α -emitters were extracted in cylinders at room temperature $20 \pm 2^\circ$. The tributyl phosphate was first washed with a 5% NaCl solution, then with water and distilled under vacuum; concentrated HNO_3 was prepared according to the Erdman method (Ref.7: Yu.V. Karyakin, Chistyie khimicheskiye reaktivy "Pure chemical reagents", 233. Goskhimizdat, M., (1947)). The Am-content in both organic and aqueous phase was determined radiometrically; the concentration of HNO_3 by volumetric titration with alkali with methyl orange. The coefficient of distribution α_{Am} was calculated as the ratio of the equilibrium concentration of Am in the organic and aqueous phase. It was found that the coefficient of distribution of Am, in the presence of non-extracted nitrates increases with increasing concentration of nitrate and

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